

Section (b) - Amendments to the Claims

Claim 1 (withdrawn)

Claims 2-14 (cancelled)

Claim 15 (currently amended) A system for supplying hyperbaric oxygen to a biological entity, said system comprising:

a vessel capable of receiving and maintaining said hyperbaric oxygen and enclosing said biological entity;

a pressurized gas source for supplying said hyperbaric oxygen;

an a high surface area oxygenator for receiving said hyperbaric oxygen;

a perfusate for absorbing said hyperbaric oxygen within said oxygenator; and

a fluid delivery tube attached to said oxygenator; and

a high pressure pump to circulate said perfusate;

whereby oxygenated perfusate is delivered under a sustained pressure environment greater than one atmosphere absolute to said biological entity through said fluid delivery tube.

Claim 16 (original): The system as defined in Claim 15, further including a metabolic supplement, whereby said metabolic supplement is added to said perfusate for delivery to said biological entity.

Claim 17 (original): The system as defined in Claim 16, further including means for monitoring the effect of said metabolic supplement on said biological entity.

Claim 18 (original): The system as defined in Claim 15, wherein said oxygenated perfusate contains at least 4.5 volume percent oxygen.

Claim 19 (original): The system as defined in Claim 15, further including a temperature control unit whereby the temperature of said perfusate and said biological entity can be regulated from approximately 0 degrees centigrade to approximately 40 degrees centigrade.

Claim 20 (original): The system as defined in Claim 15, wherein said perfusate contains biological entity waste products and said system further comprises a biological filter for removal of said biological entity waste products.

Claim 21 (currently amended): The system as defined in Claim 15, further including a an open perfusate container for holding said biological entity and a quantity of said perfusate within said vessel wherein said system is maintained at a pressure greater than one atmosphere absolute.

Claim 22 (cancelled)

Claim 23 (currently amended): The system as defined in Claim 15, further including a negative pressure means for circulating said perfusate from said biological entity to said oxygenator, wherein said system functions in a manner similar to natural vascular physiology.

Claim 24 (currently amended): The system as defined in Claim 23, further including at least one access port in said means for circulating said perfusate wherein said access port functions in a manner similar to access to a natural venous system.

Claim 25 (original): The system as defined in Claim 24, wherein said at least one access port permits the addition of drugs or pharmaceutical agents.

Claim 26 (currently amended): The system as defined in Claim 24, wherein said at least one access port permits the extraction of a quantity of said perfusate, wherein waste products may be removed from said perfusate and said perfusate may be analyzed.

Claim 27 (currently amended): The system as defined in Claim 24, wherein said at least one access port permits the addition of a quantity of said perfusate, wherein waste products may be diluted.
